

Date: Fri, 26 Mar 93 17:00:25 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #381  
To: Info-Hams

Info-Hams Digest                        Fri, 26 Mar 93                        Volume 93 : Issue 381

Today's Topics:

\$40.00 Radio Shack SWR meter problems (2 msgs)  
160-10M Nets List / Sailing Info?  
Autopatch  
HF antennas on Aircraft  
Hf satelites  
Kenwood cw filter (and incorrect offset) (2 msgs)  
Part 97  
receiving Aircraft transponders  
RFD: rec.radio.amateur reorganization

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Fri, 26 Mar 1993 13:54:11 GMT  
From: psinntp!gdstech!gdstech!bat@uunet.uu.net  
Subject: \$40.00 Radio Shack SWR meter problems  
To: info-hams@ucsd.edu

Can you guys explain to a Bozo (me) how to use that correction graph  
on the back of the meter? I have RTFM'd several times, it seems  
a tad bit inadequate. Thanks.

--

\*-----\*  
\* Pat Masterson D12-25 | KE2LJ@KC2FD \*  
\* Grumman Data Systems | 516-346-6316. \*  
\* Bethpage, NY 11746 | bat@gdstech.grumman.com \*

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Date: 26 Mar 93 16:07:45 GMT  
From: ogicse!uwm.edu!zaphod.mps.ohio-state.edu!sdd.hp.com!col.hp.com!  
bobw@network.UCSD.EDU  
Subject: \$40.00 Radio Shack SWR meter problems  
To: info-hams@ucsd.edu

bat@gdstech.GRUMMAN.COM (Pat Masterson) writes:

> Can you guys explain to a Bozo (me) how to use that correction graph  
> on the back of the meter? I have RTFMd several times, it seems  
> a tad bit inadequate. Thanks.  
> --

OK, I got the manual out and looked at it. You're right its  
at least a tad bit inadequate.

Here's more fuel to the fire:

The graph on the back of the meter converts "SWR READING"  
to "CORRECTED SWR". (This 'correction' is done on most SWR  
meters with the CAL switch and CAL adjustment.)

First, you need to know the transmit power, so set the meter  
function switch to "power" and take that reading. (Don't forget  
to set the meter "range" so that it doesn't peg the meter.)

Next set the meter to "swr" and take the SWR READING.  
These two readings (power and swr) translate to the vertical and  
horizontal axes on the correction graph. So find the spot  
on the graph where the power reading (vertical) and swr reading  
(horizontal) intersect. For example, SWR=1.5 and Power= 30 Watts  
produces a point about 3/4 of the way up in the vertical axis and  
centered in the horizontal axis. This point is marked with a dashed  
line on my meter.

Now read off the CORRECTED SWR, which is given by the lines running  
across the graph at about a 45 degree angle. Find the line closest  
to the SWR/POWER point on the graph and locate the CORRECTED SWR  
number associated with that line. (The CORRECTED SWR numbers list  
across the top of the graph, but note that the <15 Watt section  
has its own set of numbers.) For SWR=1.5 and Power=30, the CORRECTED  
SWR reading is 1.5, which is to say no correction is required for  
readings of 30 watts. Interpolate between the lines for more accuracy.

So having written all this down, I suggest you throw away any radio  
that does not operate in the 10 to 15 W or 25 to 40 W range if you  
are going to use this meter. :-) Seriously, I like the meter just  
fine for quick, gross checks but not for fine measurements.

Hope this helps,

Bob "don't wanna be no manual writer" Witte

Bob Witte / HP Colo Springs / bobw@col.hp.com / KB0CY

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Date: Fri, 26 Mar 1993 15:05:23 GMT  
From: yuma!gw214790@purdue.edu  
Subject: 160-10M Nets List / Sailing Info?  
To: info-hams@ucsd.edu

In article <C4Guzw.MDx@well.sf.ca.us> roy@well.sf.ca.us (Roy Harvey) writes:  
>I'm wondering if a 160-10M Net schedule list is available online? If so,  
>could someone please post it or mail it to me.

An online directory, I don't know, but the ARRL prints a net directory  
costing one buck.  
>I'm told that ocean sailing hams have their own net? Anyone one know the  
>time and/or frequency?  
>N6UVC

There's the Maritime Mobile Net on 14.300, I think it goes 24 hrs but I  
usually get it from 20:00 thru 03:00 UTC.

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Date: 26 Mar 93 15:08:32 GMT  
From: psinntp!arrl.org@uunet.uu.net  
Subject: Autopatch  
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, gary@ke4zv.uucp (Gary Coffman) writes:  
>  
>The FCC rules don't require a CW ID for any transmission except a  
>CW transmission. It's allowed, but it's not required. Normally you'd  
>ID using the same mode as the rest of the transmission, in this case  
>by voice announcement.  
>

That's fine for the individual USING the repeater. But the original  
author was curious about the need for the REPEATING device to ID,  
which -- according to the rules -- it certainly must.

So, yes, it would be easy for the user to ID on voice. Less so for the  
various repeater transmitters...

|       |       |       Deputy Manager, Field Services, ARRL.  
|       | \_\_\_|       The ARRL Amateur Radio Emergency Service, the ARRL  
| uck   |    urder   National Traffic System, The Amateur Auxiliary to  
-----|       |       the FCC's Field Operations Bureau, the ARRL  
      KY1T           Field Organization and the ARRL Monitoring System.

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lhurder@arrl.org   Prodigy - MGTS39A, BIX - ARRL,  
MCI Mail - RPALM, MCI Mail - "ARRL", America On Line - "ARRL HQ"  
Compuserve - 70007,3373 (ARRL HQ) -- Genie ARRL.HQ

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Date: 27 Mar 93 03:30:22 GMT  
From: ogicse!uwm.edu!wupost!waikato.ac.nz!aukuni.ac.nz!kcbbs!kc@network.UCSD.EDU  
Subject: HF antennas on Aircraft  
To: info-hams@ucsd.edu

How do I feed a wire antenna trailing behind an Airplane ?

Is it low impedance (current) feed, in which case where is the counterpoise ?

Is it high impedance (voltage) feed, then what is the feed arrangement ?

The only way I can see is a current loop, but this seems a bit of a complicated way of doing it.

Replies please to <steve\_wright@kcbbs.gen.nz> as well as to the group as our site doesn't hold r.r.a.etc long enough for me to catch a reply. Thanks.

73, Steve - ZL1BHD

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Date: Fri, 26 Mar 1993 15:11:11 GMT  
From: elroy.jpl.nasa.gov!ncar!csn!yuma!gw214790@uunet.uu.net  
Subject: Hf satelites  
To: info-hams@ucsd.edu

In article <1993Mar26.025502.11970@osuunx.ucc.okstate.edu>  
gcouger@olesun.okstate.edu (Gordon Couger) writes:  
>I am interested in trying to use some of the  
>satellites that have HF capabilities. I need to  
>know which birds have this capabilities and  
>what there frequencies are.

>AB5D

In the April 93 QST p. 94 is a table of sat freqs. The only HF in the table is RS 12/13, up on 21.21 to 21.25, down on 29.41 to 29.45.

If you find out about others, please post as I am interested also.

KF0YJ

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Date: 26 Mar 93 16:39:38 GMT

From: pa.dec.com!engage.pko.dec.com!tsar.enet.dec.com!hitz@decwrl.dec.com  
Subject: Kenwood cw filter (and incorrect offset)  
To: info-hams@ucsd.edu

|>Is this a generic Kenwood thing? Are there any other readers with  
|>\*other\* Kenwood models that do this?

I purchased a TS930 some decade ago and it had the well known problem of "driver burnout". In sending the unit back to

Kenwood for repair, they not only fixed the driver stage, but did me the favor of "aligning" the radio. At the time I was 100% digital modes - baudot and AMTOR - and really liked having two five hundred hertz filters and VBT. I spent the extra bux (over a single filter TS430, for example) to get dual filtering and VBT and the way they initially returned the radio to me was just not acceptable. It subsequently took two ADDITIONAL round trips back to California before they even came close to understanding the problem and making the radio IF response close to the way it was when it came from the factory.

The concept of VBT is clever, but I think that for it to work properly, in volume manufacturing, it needs filter specs (especially around center freq) that are a bit tighter than what they are. That accomplished, the service techs need to know what to look for!

Try running your frequency response curves as a function of VBT, if you have it. Don't be surprised if the result is less than ideal!

George, W1DA  
hitz@tsar.enet.dec.com

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Date: Fri, 26 Mar 1993 15:40:41 GMT  
From: psinntp!gdstech!gdstech!bat@uunet.uu.net  
Subject: Kenwood cw filter (and incorrect offset)  
To: info-hams@ucsd.edu

A local ham technician aligned my TS130. He said it was perfectly centered in the passband. But, it'd not. To copy weak CW sigs, I have to move my IF shift left a bit. I have looked at SSB audio to see how it's affected, but I shall do so tonite.

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\* Pat Masterson D12-25 | KE2LJ@KC2FD \*  
\* Grumman Data Systems | 516-346-6316. \*  
\* Bethpage, NY 11746 | bat@gdstech.grumman.com \*

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Date: 26 Mar 93 10:51:51 EST  
From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa  
Subject: Part 97  
To: info-hams@ucsd.edu

In article <1993Mar25.115000.986@hemlock.cray.com>, dadams@cray.com (David Adams) wrote:  
> Is there someplace I can get a (preferably e-mail) copy of Part 97?

David-

The latest edition of Part 97 that ARRL has published, is dated 1989. I have seen an MS-DOS program that was actually Part 97 with a search capability, but don't remember where I saw it. It was also rather old, as was a text file I saw sometime back.

I just got back from the Mobile Communications Expo, where one of the exhibitors sold subscriptions to various parts of the FCC rules. They claim that their rules are more up-to-date than the FCC's copy, since rules are updated through the Federal Register, and the FCC doesn't do an update to their master copy very often. They charge \$20 per year (US), \$30 per year (foreign), for Part 97. Other parts have varying prices. To my knowledge, they do not offer a machine readable version.

The company is:

Rules Service Company  
7615 Standish Place  
Rockville, Maryland 20855  
(301)424-9402  
FAX (301)762-7853

73, Fred, K4DII

fred-mckenzie@ksc.nasa.gov

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Date: 27 Mar 93 03:30:25 GMT  
From: ogicse!uwm.edu!wupost!waikato.ac.nz!aukuni.ac.nz!kcbbs!kc@network.UCSD.EDU  
Subject: receiving Aircraft transponders  
To: info-hams@ucsd.edu

Does anyone know what frequency Aircraft mode C transponders transmit on and or what type of modulation they use ?

I took on the project of trying to receive a GPS satellite until I found out that its' transmissions are spread spectrum... 8-} I don't suppose anyone knows what GPS systems CHIP code is ?

replies to this group and to me <steve\_wright@kcbbs.gen.nz> thanks.

73, Steve - ZL1BHD

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Date: 26 Mar 1993 10:50:20 -0500  
From: bounce-back@uunet.uu.net  
Subject: RFD: rec.radio.amateur reorganization  
To: info-hams@ucsd.edu

REQUEST FOR DISCUSSION  
REORGANIZATION OF REC.RADIO.AMATEUR

This request for discussion is the beginning of the newsgroup creation process outlined in GUIDELINES FOR NEWSGROUP CREATION, which can be found in news.groups. Because of the high volume of traffic in rec.radio.amateur.misc, a mail list was created (with an open invitation posted to the newsgroup) to discuss the issue. This RFD is in response to two problems that were identified by the mail list.

- 1) rec.radio.amateur.misc has a daily traffic volume which is too high for most people to follow on a regular basis.
- 2) rec.radio.amateur.packet needs to be renamed due to the growth of other digital modes besides packet on amateur radio.

30-DAY DISCUSSION PERIOD

The newsgroup creation guidelines require a 30-day discussion period. All comments which are to be considered toward this discussion must take place on the news.groups newsgroup. For that reason, this RFD contains the header line "Followup-To: news.groups" so that replies will only go there.

This discussion period is not a voting period. If the discussion period shows that there is sufficient support, the process will continue on to a 21-31-day voting phase, which will be described in a Call for Votes (CFV) article.

Modifications may be made to the proposal during the current discussion phase. Once a CFV is posted, the proposal at that time may only be approved or rejected. No modifications will be made during the vote.

Comments and discussion posted to rec.radio.amateur.misc and rec.radio.amateur.packet cannot be considered official. However, users of the Info-Hams and Packet-Radio mailing lists, which are linked to these newsgroups, cannot access news.groups. So discussion of how to handle the mail lists may take place there on an unofficial basis. This unofficial procedure is being acknowledged in the RFD because no alternative exists for the mail list users. Users must remember 1) the process does not require any action on articles posted outside news.groups and 2) final authority for the mail lists lies with their administrators.

#### NEWSGROUP REORGANIZATION PROPOSAL

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The scope of this RFD is the newsgroups within the rec.radio.amateur hierarchy. Other newsgroups (even others under rec.radio) are not a subject of this RFD. The CFV following this RFD, if a CFV is issued, will not propose any changes outside of rec.radio.amateur.

The current newsgroups are as follows:

[all the following groups are unmoderated]  
rec.radio.amateur.misc      Amateur radio practices, contests, events, etc.  
rec.radio.amateur.packet      Discussion about packet radio setups  
rec.radio.amateur.policy      Radio use & regulation policy

In determining a reorganization of rec.radio.amateur which frees some of the traffic from the single newsgroup rec.radio.amateur.misc, the members of the reorganization mail list considered the following guidelines which the participants in this discussion are also asked to consider:

- \* More is not necessarily better. Several newsgroups were proposed and then dropped because the traffic levels on those subjects do not warrant their

own newsgroup. (examples: video, repeaters, antennas)

\* We were not trying to use new newsgroups as a place to discard unwanted subjects. With as large an audience as rec.radio.amateur has, everyone would want to discard some subjects somewhere so WE DID NOT CONSIDER THAT A VALID REASON TO CREATE A NEWSGROUP. There is no rec.radio.amateur.cw in this proposal because the productive areas of that subject fit better within r.r.a.operating and r.r.a.instruction. Most of the heated arguments about morse code requirements will still belong in r.r.a.policy under this proposal. All newsgroups in this proposal were justified by sustained traffic volume in that topic. A borderline case (emergency services) was decided in its favor because it is part of the purpose of amateur radio, as much as experimentation is.

The proposed reorganization of rec.radio.amateur would result in the following groups: [all the following proposed groups are unmoderated]

| Newsgroup name                   | description   |
|----------------------------------|---|
| -----                            | -----   |
| rec.radio.amateur.misc           | all Ham radio topics not covered below<br>i.e. video, stories, humor, new topics<br>[no modification to existing newsgroup] |
| rec.radio.amateur.policy         | regulations & policy issues<br>[no modification to existing newsgroup]  |
| rec.radio.amateur.digital.misc   | packet radio & other digital modes<br>[includes old rec.radio.amateur.packet]   |
| rec.radio.amateur.digital.tcp-ip | TCP/IP via packet radio   |
| rec.radio.amateur.operating      | Operating procedures and questions: DX,<br>CW, contests, propagation, repeaters   |
| rec.radio.amateur.products       | manufactured equipment, modifications   |
| rec.radio.amateur.instruction    | Ham radio instruction & examination   |
| rec.radio.amateur.construction   | homebrewing & experimentation   |
| rec.radio.amateur.space          | amateur radio in space: satellites,<br>earth-moon-earth (EME), shuttle, MIR   |
| rec.radio.amateur.emerg-services | emergency services: RACES, ARES, NTS  |

Under this proposal, rec.radio.amateur.packet will become an alias for rec.radio.amateur.digital.misc, which is intended to replace it.

An alternate proposal, aimed at having fewer newsgroups, found some support in the reorganization mail list. It is presented here as a potential alternative for use in the discussion, as a gauge of which one the rec.radio.amateur community prefers. It amends the proposal as follows:

| Newsgroup name         | description   |
|------------------------|---|
| -----                  | -----   |
| rec.radio.amateur.tech | Technical discussions about Ham Radio:<br>construction, satellites, theory,<br>examinations, video, repeaters |

[unmoderated]

[this replaces r.r.a.instruction, r.r.a.construction, and r.r.a.space, plus taking all technical topics from r.r.a.misc]

## REFERENCES

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If any users wish to see a transcript of the discussion on the reorganization mail list which led up to this RFD, it is available for anonymous FTP at charon.amdahl.com (129.212.11.1) in /pub/radio/amateur/rra-reorg.log.1.Z (160K+ after decompression.)

The mail list was created after a public invitation to join that was posted with worldwide distribution. The following people chose to participate:

ehare@arrl.org (Ed Hare KA1CV)  
ikluft@uts.amdahl.com (Ian Kluft KD6EUI)  
jmaynard@oac.hsc.uth.tmc.edu (Jay Maynard K5ZC)  
brian@nucleus.amd.com (Brian McMinn N5PSS)  
mark@ve6mgs.ampr.ab.ca (Mark Salyzyn VE6MGS)  
steve@matt.ksu.ksu.edu (Steve Schallehn KB0AGD)  
pschleck@cwis.unomaha.edu (Paul W Schleck KD3FU)  
steve@wattres.sj.ca.us (Steve Watt KD6GGD)

-----REMINDER-----

NO VOTES ARE BEING ACCEPTED AT THIS TIME - THIS IS FOR DISCUSSION ONLY  
POST ALL REPLIES IN NEWS.GROUPS WHERE THEY CAN BE OFFICIALLY COUNTED

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Date: 26 Mar 1993 14:54:45 GMT

From: dog.ee.lbl.gov!hellgate.utah.edu!cs.utexas.edu!usc!howland.reston.ans.net!  
noc.near.net!news.bbn.com!bbn.com!levin@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <1993Mar23.135145.20978@cbfsb.cb.att.com>,  
<1993Mar24.130705.17235@magnus.acs.ohio-state.edu>,  
<1993Mar25.000101.9350@ke4zv.uucp>  
Subject : Re: source for spools of wire

gary@ke4zv.uucp (Gary Coffman) writes a great war story:

|To get us back on the air quickly, I loaded the transmitter  
|into the top barb wire of the perimeter fence. The phone rang  
|moments before I was going to notify the FCC of the happening.  
|It was the FCC monitoring station. They wanted to know \*why\*

|they were hearing our station. They never had in the past.  
|When I informed the engineer of what had happened, and what  
|I'd done, he said "You loaded into WHAT?" We finally worked out  
|a deal where I reduced output power until he couldn't hear us  
|anymore. The moral of this story is that galvanized wire \*works\*  
|as a transmitting antenna.

One wonders why they would bother to erect a tower inside that fence if the fence itself does so much better! Sounds like they could have saved more money swapping their old transmitter for a cheaper-to-run lower power job, too!

/JBL N1MNF/AA

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Date: Fri, 26 Mar 1993 13:51:31 GMT  
From: caen!usenet.cis.ufl.edu!usenet.ufl.edu!mailer.cc.fsu.edu!geomag!  
zateslo@uunet.uu.net  
To: info-hams@ucsd.edu

References <C4Bqns.31G@news.cso.uiuc.edu>, <N4HY.93Mar24101452@tang.ccr-p.ida.org>, <C4EvsL.D7E@news.cso.uiuc.edu>i  
Subject : Re: Armstrong/DeForest regenerative receiver

In article <C4EvsL.D7E@news.cso.uiuc.edu> jtg0707@uxa.cso.uiuc.edu (Jui Tien) writes:

>n4hy@tang.ccr-p.ida.org (Bob McGwier) writes:

>>JT uses the following unacceptable phrase:

>>>Armstrong/DeForest receiver.

>

>>No self respecting ham would put Amstrong's name anywhere near DeForest's  
>>unless some four letter words precedes DeForest's. It is, was, and always  
>>will been the ARMSTRONG regenerative receiver.

>

>Lighten up!

>Armstrong may be responsible for the receiver, but teh fact that DeForest  
>invented the vacuum tube was recorded in history. (OK, so he stole the idea  
>from someone else.) There is no question that Armstrong was teh better of the  
>two, but without the DeForest's work on the vacuum tube, Armstrong would have  
>nothing to improve on.

> [...]

>DeForest may have been a wretched human being, but he did put the first  
>working vacuum tube together.

>J.T.

Okay, we'll give deForest credit for inventing (stumbling upon?) the triode, but he did \_not\_ invent the regenerative receiver. E. H.

Armstrong did.

Reducing this line \_ad absurdum\_, I might as well call my code oscillator  
a Bardeen/Brattain/Heathkit... :-)

Ted Zateslo, W1XO  
zateslo@geomag.gly.fsu.edu

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Date: Fri, 26 Mar 1993 13:34:02 GMT  
From: agate!howland.reston.ans.net!gatech!usenet.ufl.edu!mlb.semi.harris.com!  
SU19F!jhobson@ames.arpa  
To: info-hams@ucsd.edu

References <1993Mar24.131722.1@levy.fnal.gov>, <1oqrjmINNkil@elroy.jpl.nasa.gov>, <930325.235129.8E3.rusnews.w165w@garlic.sbs.com>U  
Reply-To : jhobson@SU19F.ess.harris.com (Harv Hobson)  
Subject : Licensing, a new proposal :^) (was: Re: Real NoCodes)

I propose the following CW code speed requirements for the incentive  
licensing structure.

Novice 5 WPM  
General 1 WPM  
Advanced 1 WPM  
Extra .1 WPM (and NOT Farnsworth!!!!)

As one progresses in the hobby, one should learn to conserve precious  
resources. By learning the to copy CW at slower speeds, narrower  
bandwidths could be used.

Extra class testees would not be allowed to use stop watches during  
CW testing. The alternative to a passing score on the multiple choice  
test would be 100 words solid copy rather than the usual 1 minute  
solid copy.

Is it Friday yet or do I \*have to\* read all this bickering between  
dem lazy no-good old farts and the bigot geezer no-codes any more this week?

Harv Hobson  
WB4NPL  
jhobson@su19f.ess.harris.com

:)

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Date: 26 Mar 93 14:55:13 GMT  
From: ogicse!emory!rsiatl!ke4zv!gary@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <1993Mar23.150507.24567@neptune.inf.ethz.ch>, <1993Mar24.000732.3312@ke4zv.uucp>, <C4GwLt.Fnp@unccsun.uncc.edu>  
Reply-To : gary@ke4zv.UUCP (Gary Coffman)  
Subject : Re: Nicad Memory Effect-Fact or Myth?

In article <C4GwLt.Fnp@unccsun.uncc.edu> wlhamaty@unccsun.uncc.edu (W Luke Hamaty) writes:

>Gary says that the "wall cube" chargers do not sense the voltage, and so will >overcharge a battery pack. Does anyone know how smart the ICOM type battery >packs are about this? I know there is some circuitry built into these things, >and I am sure that there is a current limit, but do they sense the charge >level?

Well Gary says that Icom packs use a thermal cutout to manage overcharge. The cells will experience a sharp temperature rise once they've reached full charge. The thermal cutout in the Icom packs will open with this rise, temporarily stopping charging. Their desk chargers can sense this and switch to trickle mode when the thermal cutout cools and closes. The wall cubes cannot. So you get repeated temperature cycling with the wall cube. On the plus side, the wall cubes supply the 10 hour rate, but on the minus side the thermal cutout requires a respectable temperature rise. So your batteries both overcharge and overheat for fairly long periods when left on the wall cube.

Gary

--

|                             |  |              |  |                          |
|-----------------------------|--|--------------|--|--------------------------|
| Gary Coffman KE4ZV          |  | You make it, |  | gatech!wa4mei!ke4zv!gary |
| Destructive Testing Systems |  | we break it. |  | uunet!rsiatl!ke4zv!gary  |
| 534 Shannon Way             |  | Guaranteed!  |  | emory!kd4nc!ke4zv!gary   |
| Lawrenceville, GA 30244     |  |              |  |                          |

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End of Info-Hams Digest V93 #381

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